

Ozone Gardens for the Citizen Scientist

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Virginia Living Museum



Marshall Early Learning Center



Our Lady of Mount Carmel School



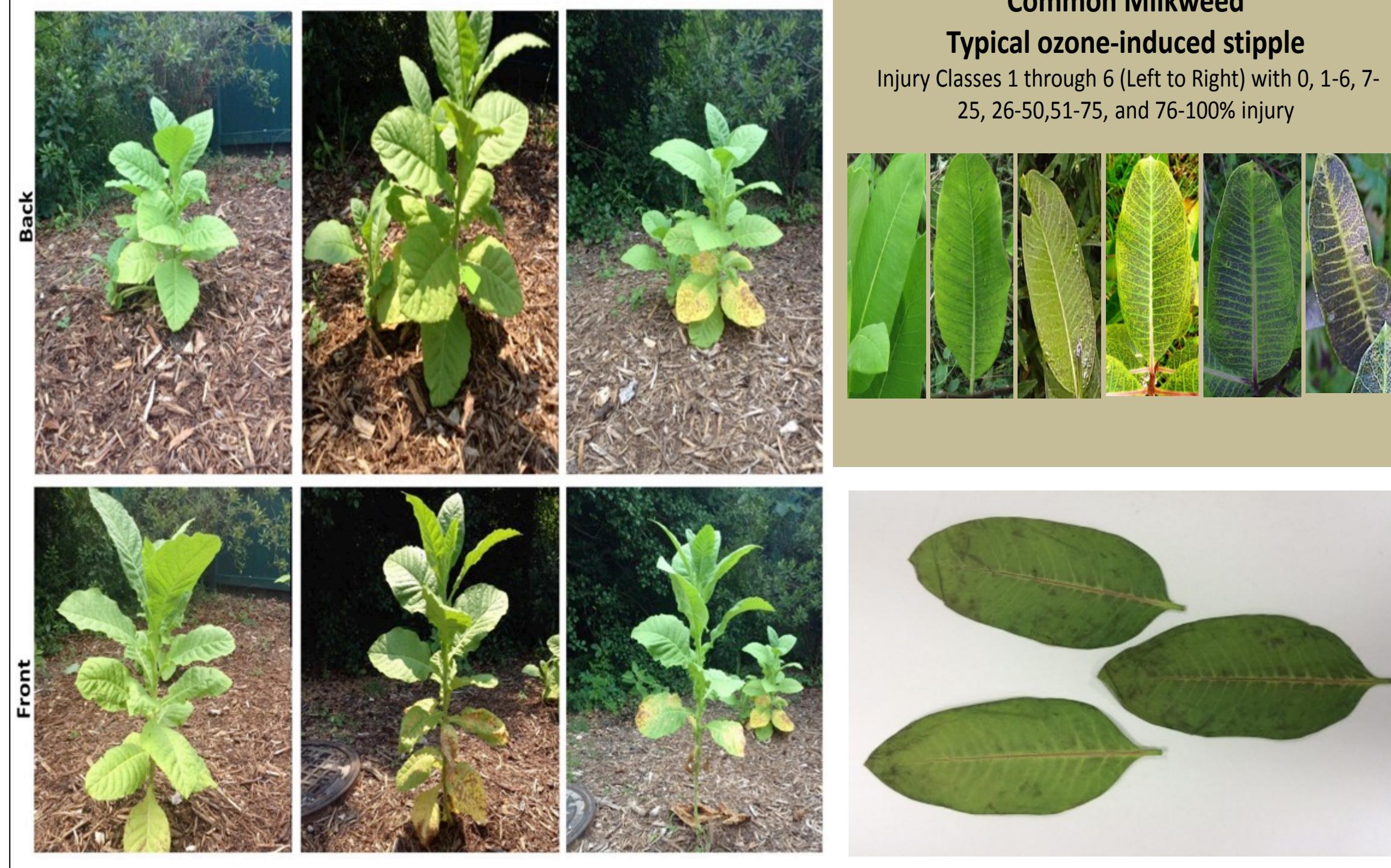
Our Ozone Gardens

NASA Langley partnered with the Virginia Living Museum and two schools to create ozone bioindicator gardens for citizen scientists of all ages. The garden at the Marshall Learning Center is part of a community vegetable garden designed to teach young children where food comes from and pollution in their area, since most of the children have asthma. The Mt Carmel garden is located at a K-8 school. Different ozone sensitive and ozone tolerant species are growing and being monitored for leaf injury. In addition, CairClip ozone monitors were placed in the gardens and data are compared to ozone levels at the NASA Langley Chemistry and Physics Atmospheric Boundary Layer Experiment (CAPABLE) site in Hampton, VA. Leaf observations and plant measurements are made two to three times a week throughout the growing season.

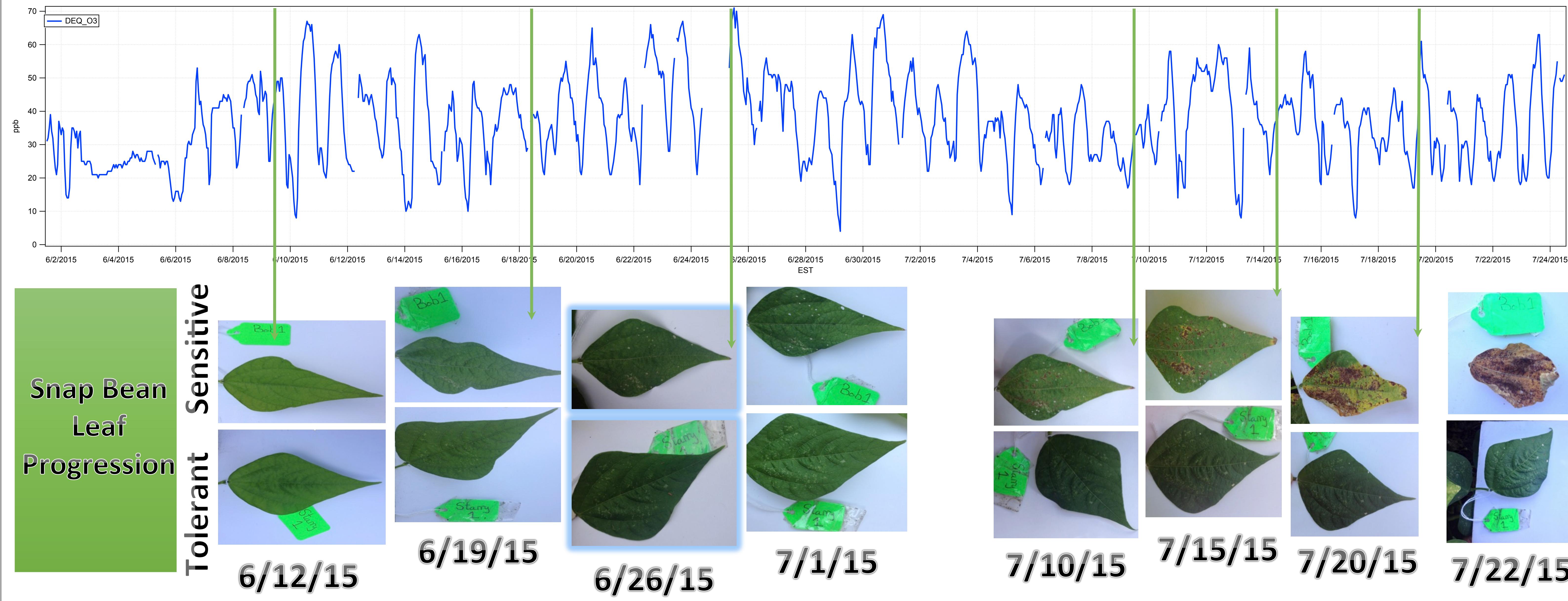


Pictured to the right are young citizen scientists planting seeds and a NASA Intern checking the ozone monitor at the museum garden.

<u>Agricultural Plants</u>	<u>Sensitive</u>	<u>Tolerant</u>	<u>Ozone Sensitive Native Plants</u>
<i>Solanum tuberosum</i> Potato	<i>La Chipper</i>	<i>Superior</i>	Common Milkweed
<i>Nicotiana tabacum</i> Cigar Wrapper Tobacco	<i>Bel-W-3</i>	<i>Bel-B</i>	Cutleaf Coneflower
<i>Phaseolus vulgaris</i> Green Bean	<i>S-156</i>	<i>R-331</i>	Black Cherry



Ozone and Leaf Stippling June- July 2015



Data Collection Sheets designed for Citizen Scientists of all ages visiting the museum